

REMARKS

Claims 1-23 are pending in the application. Claims 1, 13, 14, and 23 have been amended. Claims 2-4, 6-12, and 15-22 remain un-amended. The changes to the amended claims have shown with brackets for deletions and underlines for additions. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

OATH/DECLARATION

The unsigned declaration referred to by the Examiner was not formally submitted. The Applicants filed an application data sheet on June 15, 2006 under 37 CFR §1.76, wherein priority to the foreign applications was asserted.

37 CFR § 1.68 (a) (3) provides that an oath or declaration may be corrected by an application data sheet in accordance with 37 CFR §1.76, where the deficiency or inaccuracy is in failing to meet the requirements of 37 CFR §1.63 (c). In particular, the aspect of a declaration relating to claiming of foreign priority is found in 37 CFR §1.63 (c) (2), and thus the submitted application data sheet obviates the need for a supplemental oath or declaration.

Should a supplementary declaration be needed after a Notice of Allowance has issued, the Applicants undertake to provide such a paper.

REJECTION UNDER 35 U.S.C. 251

Claims 1-23 stand rejected as being based upon a defective reissue

declaration under 35 U.S.C. 251. Applicants respectfully request reconsideration and withdrawal of this rejection based on the reasons as set forth above.

REJECTIONS UNDER 35 U.S.C. § 102

Claims 1, 6-10, 13-14, 17-19 and 23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Kawakami et al. (JP 06-333879). Additionally, Claims 1, 6-10, 13-14, 17-19 and 23 were rejected as being anticipated by Sakai et al. (JP 10-032171).

The Applicants respectfully traverse these rejections.

In order to more fully distinguish Applicants' invention, independent Claim 1 has been amended to call for a plasma treatment equipment that has a chamber for performing plasma treatment and includes "a plasma excitation electrode to which power for plasma excitation is supplied, the plasma excitation electrode being provided in the chamber; and a susceptor electrode that is opposed to the plasma excitation electrode provided in the chamber, the susceptor electrode having the same DC potential as that of a chamber wall of the chamber, the susceptor electrode being an electrode into which a high frequency electric current based on the power for plasma excitation flows after passing through a plasma space; wherein the chamber wall of the chamber and the susceptor electrode are AC shorted to each other." Independent Claims 13 and 23 have each been amended in similar fashion. Support for the amendments to independent Claim 1 may be found in, for example, Figure 5 (and corresponding text). Support for the amendments to independent Claim 13 may be found in, for example, Figure 10 (and corresponding text).

Applicants respectfully submit that a minimum, both Kawakami et al. and Sakai et al. fail to disclose or suggest plasma treatment equipment as recited by the independent claims.

With regards to the Kawakami et al. reference, the Examiner has asserted that the lower electrode 8 and lower electrode 12 discloses the recited susceptor electrode. Applicants respectfully note that a more accurate reading of Kawakami et al. reveals that the opposing electrode 6 is grounded and more accurately represents a plasma excitation electrode that receives high frequency power. In other words, Kawakami et al. discloses an earth shield of a plasma excitation electrode that is provided for the purpose of generating plasma in a stabilized manner as opposed to the susceptor electrode distinctly recited by the present invention. Additionally, the Claim 1 has been amended to recite the feature of, "the susceptor electrode being an electrode into which a high frequency electric current based on the power for plasma excitation flows after passing through a plasma space." The Kawakami reference fails to disclose or suggest the direction in which a plasma excitation electric current flows as taught by the present invention. As such, Applicants respectfully submit that Kawakami et al. fails to anticipate Claim 1.

Likewise, Sakai et al. at a minimum fails to disclose or suggest the plasma treatment equipment as called for by the present invention. In Sakai et al., the Examiner points to the cathode electrode 1 of Sakai et al. that includes the top cathode electrode 1a and the bottom cathode electrode 1b and the dielectric 11 to disclose the

the claimed susceptor electrode. Applicants respectfully disagree. Applicants submit that in contrast to the recited susceptor electrode asserted by the Examiner, Sakai et al. actually discloses a cathode electrode, more specifically a "high-frequency excitation electrode" as noted in paragraph 0022 of the reference. Furthermore, the present invention calls for a chamber wall and a susceptor electrode (or a shield of a susceptor electrode) provided at a side area or region into which a plasma excitation electric current flows and which are shorted together. This configuration and structure is clearly not taught or suggested by the cited art.

Additionally, Sakai et al. is not directed to solving the same problems as the present invention which is to reduce impedance downstream of the recited susceptor electrode which is achieved by short-circuiting the chamber wall and the susceptor electrode, thereby enhancing power consumption efficiency. In contrast, Sakai et al. discloses a technique for spreading or diffusing plasma in a chamber in a uniform fashion.

Therefore, Applicants respectfully request that the 35 U.S.C. § 102(b) rejections against independent Claim 1 and its dependent claims be removed. Applicants note that Independent Claims 13 and 23 have been amended to recite similar limitations as independent Claim 1 and, thus, are allowable for at least the same reasons set for above. As such, Applicants respectfully request that the 35 U.S.C. § 103(2) rejections against independent Claims 13 and 23 and their respective dependent claims be removed.

DOUBLE PATENTING REJECTION

Claims 1-23 were rejected on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 4 and 9 of Nakano. The Applicants continue to believe that the Examiner's rejection on these grounds is misplaced. However, in order to expeditiously conclude the prosecution of this matter, a terminal disclaimer will be submitted, providing that the allowed claims in this application are as currently set forth.

CONCLUSION

Claims 1-23 are pending. For at least the reasons given above, the Applicants respectfully submit that the pending claims are allowable, or would be allowable if a terminal disclaimer were to be submitted.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,

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